

# State of Iowa Outcomes Monitoring System

# YEAR 14 ANNUAL OUTCOME EVALUATION REPORT

September 2012

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With Funds Provided By:
Iowa Department of Public Health,
Division of Behavioral Health



#### **EXECUTIVE SUMMARY**

The Outcomes Monitoring System (OMS) was established to systematically gather data on substance abuse treatment outcomes in Iowa. Randomly selected clients from 22 Iowa Department of Public Health-funded treatment agencies were contacted for follow-up interviews that occurred approximately six months after discharge from treatment. Clients admitted in calendar year 2011 were selected to participate in the OMS project. This report presents outcomes for 408 of the clients who completed the follow-up interview.

#### **Client Characteristics of 2011 OMS Sample**

Age and Sex: Clients ranged from 14 to 79 years of age with a median age of 32 years. Six hundred eighty-one clients (72.9%) were male and 252 (27%) were female; sex was not reported for one client at admission.

Race and Ethnicity: Eight hundred three clients (86%) reported Caucasian/White as their primary race at admission; 74 clients (7.9%) reported African American/Black, 15 clients (1.6%) reported American Indian, and six clients (0.6%) reported "other race". There were 36 clients (3.9%) who responded "unknown" when asked about their race or for whom data were missing or reported as not collected. Forty-four individuals (4.7%) reported Hispanic or Latino ethnicity at admission.

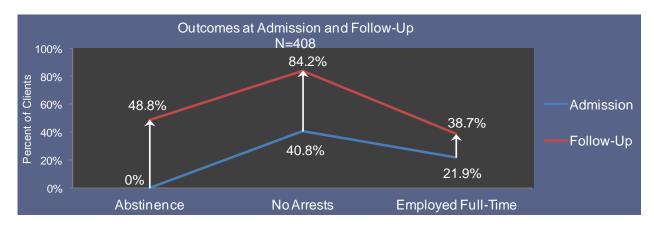
**Substance Use at Admission:** At admission, 100% of the clients indicated a primary substance of use. Alcohol was the most common primary substance reported by 49.9% of the clients, followed by marijuana (25.5%) and methamphetamine (17.2%).

#### **Outcomes for 408 Clients with Completed Follow-Up Interviews**

The following data describe outcomes at admission and follow-up for 408 clients who have completed the follow-up interview.

#### Abstinence, Arrests, and Full-Time Employment at Admission and Follow-Up

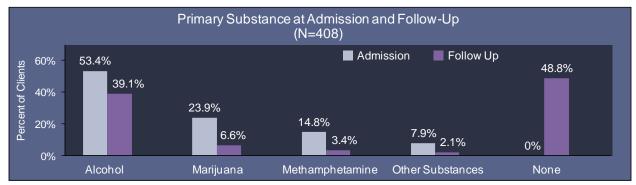
Abstinence (based on the primary substance reported) increased by 48.8 percentage points from admission to follow-up. Nearly 60% of clients reported arrests at admission, whereas fewer than 16% reported arrests at follow-up. Full-time employment increased by 16.8 percentage points; in addition to the 38.7% of clients working full-time, 21.4% of the clients reported part-time employment at follow-up; therefore over 60% of clients indicated employment at follow-up.





#### Primary Substance at Admission and Follow-Up

At both admission and follow-up, alcohol was the most commonly reported primary substance. Marijuana was the second most commonly reported primary substance at admission and follow-up, followed by methamphetamine. At follow-up, nearly half of the clients (48.8%) reported abstinence during the six months following treatment discharge, thus no primary substance was indicated.



Note: Due to rounding, percentages may not add up to exactly 100%. A client's primary substance may change from admission to follow-up.

#### Primary Substance at Admission by Outcome Variables at Follow-Up

The following table shows the three most often reported primary substances at admission by the three outcome variables of abstinence, no arrests, and employment at follow-up. There are statistically significant associations between the primary substance reported at admission and no arrests at follow-up (Cochran-Mantel-Haenszel Test, p < 0.01).

Primary Substance at Admission by Outcome Variables at Follow-Up							
Primary Substance At Admission	bstance N at Follow-Up at Follow-Up* at Follow-Up						
Alcohol	218	47.0	88.6	61.6			
Marijuana/Hashish	98	48.9	81.6	64.2			
Methamphetamine	60	53.4	75.2	50.1			

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

#### Length of Stay

Of the 934 clients in the OMS sample, discharge information was received for 867 clients; 67 were still receiving treatment services. The figure presents the percentage of clients in six length of stay



categories. The median length of stay was 61 days, with a range of zero to 458 days. Clients whose primary substance at admission was methamphetamine had the longest median length of stay of 74 days. Clients indicating marijuana as the primary substance at admission had a median length of stay of 62 days and clients whose primary substance at admission was alcohol had the shortest median length of stay of 59 days.



<sup>\*</sup> Statistically significant (Cochran-Mantel-Haenszel Test, p < 0.01).

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#### **BACKGROUND**

In July 1998, at the request of the Iowa Department of Public Health (IDPH), the Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) designed and tested an Outcomes Monitoring System (OMS) to report substance abuse treatment outcomes in Iowa. Implementation of the OMS project provided an independent evaluation regarding client outcomes and relieved treatment agencies from the responsibility of tracking and interviewing clients following discharge. The Consortium has provided ongoing client sampling, recruitment, tracking, data collection, data analysis, and reporting since January 1999.

The Consortium conducts follow-up interviews with randomly selected clients from 22 IDPH-funded substance abuse treatment agencies. The interviews occur approximately six months after discharge from the substance abuse treatment program and provide follow-up data to determine outcomes as well as analyze changes between admission and follow-up. This report examines outcomes for clients admitted to substance abuse treatment in 2011. Nine hundred thirty-four clients were selected to participate in the OMS project. This report presents outcomes for 408 of these clients who completed the follow-up interview.

#### **EVALUATION PROCESS AND METHODS**

#### **Data Collection**

IDPH-funded substance abuse treatment agencies in Iowa use several standardized client data collection systems. Data are collected by treatment agency staff on each client at admission and at discharge. The Consortium's follow-up data collection instrument integrates with client data recorded at admission. Admission data, as well as follow-up data collected by Consortium staff, are client self-reported.

#### Sampling Procedures and Data Weighting

OMS data are obtained through stratified random sampling procedures from the population of publicly funded clients participating in substance abuse treatment. This population includes clients who receive IDPH-funded drug or alcohol treatment in one of the following environments: medically managed inpatient, medically monitored residential, clinically managed residential, intensive outpatient, extended outpatient, or continuing care. The monthly data set from which the sample is drawn is composed of the previous month's admission dataset transmitted to the Consortium from IDPH. Given that the number of admissions varies from month to month, the sample size also varies. Monthly samples which contained 2011 admissions had an average size of 77 clients with a range of 56 to 91 clients. The monthly random sample size was approximately 8% of the available admission records for the adult and adolescent client population admitted to treatment in that month.

A statistical weighting procedure allows more accurate representation of the State of Iowa's admissions as a whole; data in this report are weighted. Unless noted, throughout this report, the (weighted) number of clients is rounded to the nearest integer; therefore, the numbers of clients are approximate, but the percentages are accurate.



#### Recruitment

When clients are admitted to substance abuse treatment, the agency provides materials that include a letter from IDPH describing in detail the follow-up project and the possibility of being selected for a follow-up interview. Immediately after the monthly OMS sample is selected, Consortium staff members attempt to contact clients to invite them to participate in the follow-up telephone interview. The Consortium's recruitment and tracking procedures are designed to enhance the level of participation in the evaluation process. The follow-up interview takes place approximately six months after discharge from treatment. A twenty dollar gift card is provided to the client upon completion of the follow-up interview.

When Consortium staff reach a potential participant via telephone, they explain that they are calling on behalf of the Health Research Network (HRN) to talk about participation in a public health study. HRN is a pseudonym the Consortium utilizes to assist in protecting client confidentiality. Procedures are established so that phone calls and mail from the Health Research Network may in no way be connected to substance use issues. Staff members confirm the identity of the client before describing the project in detail. The confirmation process includes matching the client's date of birth and last four digits of their social security number. If the information matches, the staff member reads the "Information Summary and Consent Document" that describes the OMS project and attempts to recruit the client by securing an oral agreement to participate in the follow-up interview. Participants are informed that they will receive periodic update calls or letters, approximately every six to eight weeks, in an attempt to keep contact information current.

The Consortium has a toll-free number which is given to clients along with information regarding the confidential voice mail system. Clients without phone contact information or who do not have telephone service are sent letters asking them to call the Health Research Network's toll-free number regarding a public health study. If clients do not respond to the phone calls or letters, treatment agency staff are contacted for assistance in updating contact information.

Clients may decline or withdraw participation in OMS at any time during recruitment or at any point during the follow-up interview process. There are no penalties for withdrawing participation in the study. Once a client declines participation, the case is officially closed unless the client later contacts the HRN and indicates a desire to participate. No future attempts are made to contact clients who choose not to participate in the follow-up interview.

#### Tracking

A web-based password-protected tracking system was developed by the Consortium to assist research assistants in managing individual client data. Client tracking information provides a database that contains updated tracking and detailed case status information for each client. This tracking information consists of the successful and attempted contacts made during efforts to communicate with the client. Detailed tracking information regarding the status of the entire OMS sample is displayed in the Appendix on pages 31 through 36.

#### **Follow-Up Interview**

In order to participate in the follow-up interview, clients must have a treatment discharge date confirmed by IDPH records. The follow-up interview is conducted by telephone six months after the client is discharged from treatment. It is not always possible to obtain the follow-up



interview exactly six months after discharge; therefore, the project design allows staff to interview participants anywhere from two weeks prior to eight weeks after the six months post-discharge date. Clients receive a twenty-dollar gift card upon completion of the follow-up interview.

#### **CLIENTS**

#### **Description of Clients at Admission**

Nine hundred thirty-four clients with 2011 admission dates were selected to participate in the OMS project. This group of randomly selected clients had substance abuse treatment admission dates from January 3, 2011 through December 30, 2011.

Clients ranged from 14 to 79 years of age with a median age of 32 years. Of the 934 clients, 27 (2.9%) were adolescents (age 17 and younger) and 907 (97.1%) were adults. Six hundred eighty-one clients (72.9%) were male and 252 (27%) were female; sex was not reported for one client at admission.

Figure 1 presents the number of males and females in six age categories. The highest numbers of males and females at admission were between 25 and 34 years of age. For all age categories, there were more males than females.

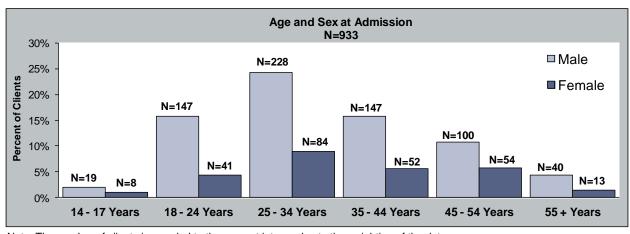
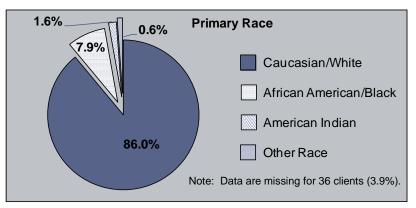


Figure 1. Age and Sex at Admission

Note: The number of clients is rounded to the nearest integer due to the weighting of the data. Data are missing for one client because sex was not reported at admission.

#### Figure 2. Race

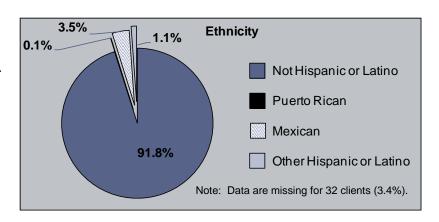
Figure 2 presents race reported at admission for clients in the OMS sample. Eight hundred three clients reported Caucasian/White as their primary race at admission; 74 clients reported African American/Black, 15 clients reported American Indian, and six clients reported "other race". The "other race" category



includes clients who reported Alaskan Native, Asian, or Hawaiian or Pacific Islander as their primary race. Additionally, there were 36 clients who responded "unknown" when asked about their race or for whom data were missing or reported as "not collected".

Figure 3. Ethnicity

Figure 3 shows ethnicity reported at admission for the 934 clients in the OMS sample. Forty-four individuals (4.7%) reported Hispanic or Latino ethnicity at admission.



#### Recruitment, Tracking, and Follow-Up Efforts

As of September 4, 2012, of the 934 clients who were selected to participate in the OMS project, 638 individuals had been contacted by Consortium staff and consented to participate in the follow-up interview; 51 clients declined to participate in the project.

Seven hundred forty-four of the clients had reached six months post discharge and were eligible to complete the follow-up interview. Of these, 408 clients completed a follow-up interview. There were 85 recruited individuals who could not be located for the interview after numerous phone calls, letters, and internet searches. Thirteen clients were incarcerated at the time of their interview; Consortium staff does not interview incarcerated individuals. Interview due dates had already passed for 17 recruited clients when the Consortium received notification of their discharge dates, 15 clients chose to withdraw from the project after previously agreeing to participate, nine recruited clients were not interviewed due to delays encountered while adjusting to the new IDPH Central Data Repository (CDR) system, and one recruited client was deceased when the interview was due. An additional 196 clients were not able to be recruited for various reasons including: 135 clients could not be located; 34 clients were incarcerated (Consortium staff does not recruit incarcerated individuals); treatment agency staff submitted discharge dates late for 14 nonrecruited clients, resulting in the follow-up interview date having



already passed when the Consortium received notification; discharge data were located for 11 clients in the CDR system after the acceptable interview timeframe; and two clients were deceased.

Efforts are underway to locate and attempt to recruit the remaining 49 clients who are still not eligible for an interview. The remaining 90 individuals who have been recruited and are not yet eligible for an interview are receiving regular update calls from Consortium staff as their interview date nears.

The recruitment rate consists of clients who were successfully recruited (638), those who declined to participate (51), and non-recruited clients whom staff were not able to locate (135). This calculation results in a recruitment rate of 77.4%. Of the recruited clients due for a follow-up interview who were not incarcerated or deceased (508 clients), 80.3% received an interview. This calculation includes all clients who completed the follow-up interview (408), recruited clients who could not be located when their interview was due (85), and those who decided not to take part in the interview after initially agreeing to do so (15). Detailed tracking information regarding the OMS sample is provided in the Appendix on pages 31 through 36.

#### CHANGES FROM ADMISSION TO FOLLOW-UP

Tables 1, 2, and 4 through 13 present admission responses from the 934 clients admitted in 2011 in the OMS sample and admission and follow-up responses from clients who have completed follow-up interviews (408 clients). The first column presents all possible responses for the question. The second column presents the admission responses for the 934 clients in the sample. The third and fourth columns describe the responses for clients who answered the particular item both at admission and at follow-up (408 clients). Table 3 presents data for a subset of the clients. Admission data are not included in Table 14, which displays education status at follow-up for adults and adolescents who completed the follow-up interview. Some of the more interesting findings are reported below.

- Primary Substance: At admission, 100% of the clients indicated a primary substance of
  use. Alcohol was the most common primary substance reported by nearly half (49.9%) of
  the 934 clients in the OMS sample. At follow-up, alcohol was also the most often indicated
  primary substance with 39.1% of clients reporting use at follow-up. Marijuana was the
  second most commonly reported primary substance at admission and follow-up, followed by
  methamphetamine.
- **Secondary Substance**: A secondary substance was reported by 55.1% of clients in the OMS sample at admission. Marijuana was the most commonly used secondary substance at admission and follow-up, indicated by 23.7% of the 934 clients in the sample at admission and 5.5% of the 408 clients completing follow-up interviews. Among the 408 clients who completed a follow-up interview, clients reporting "no secondary substance" increased from 47.7% at admission to 90.1% at follow-up, therefore, less than 10% of clients reported using more than one substance at follow-up.
- Arrests: At admission, nearly 60% of the clients in the OMS sample reported one or more arrests in the previous twelve months. Just under 16% of the clients reported arrests in the six months following treatment discharge.

- **Employment:** At admission, 38.2% of clients in the OMS sample indicated full or part-time employment. At follow-up, over 60% reported they were employed full- or part-time. Among the 408 clients completing the follow-up interview, clients indicating full-time employment increased by nearly 17 percentage points from admission to follow-up.
- **Income**: Of the 385 clients who reported an income category at both admission and follow-up, there were increases in the number of clients reporting the two highest monthly income categories (\$1001 to \$2000, and over \$2000) at follow-up. There was a decrease (7.2 percentage points) in clients who indicated they had no monthly income: 43.7% reported this at admission and 36.5% reported this at follow-up.
- Hospitalizations: There was over a twofold decrease in the number of clients who were
  hospitalized at follow-up compared to admission: 5% interviewed indicated one or more
  hospitalizations due to a substance abuse-related problem during the six months post
  discharge time period; at admission, 10.7% reported substance abuse-related
  hospitalizations in the six months prior to treatment admission.

#### **Table 1. Primary Substance**

At admission, all clients indicated a primary substance. At follow-up, nearly half of the clients (48.8%) reported abstinence during the six months following treatment discharge, thus no primary substance was indicated. The most commonly indicated primary substance at admission and follow-up was alcohol. Among clients who completed the follow-up interview, there was a decrease of 14.3 percentage points between admission (53.4%) and follow-up (39.1%) for clients reporting alcohol as the primary substance. Marijuana was the second most commonly reported primary substance at admission and follow-up, followed by methamphetamine. The percentage of clients reporting marijuana as their primary substance decreased from 23.9% at admission to 6.6% at follow-up.

Primary Substance	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		
	(weighted percent)	Admission	Follow-Up	
None	0.0	0.0	48.8	
Alcohol	49.9	53.4	39.1	
Cocaine/Crack	2.3	2.3	1.0	
Marijuana/Hashish	25.5	23.9	6.6	
Methamphetamine	17.2	14.8	3.4	
Heroin	0.8	1.0	0.0	
Non-Prescription Methadone	0.0	0.0	0.0	
Other Opiates and Synthetics	2.6	2.2	0.7	
PCP	0.1	0.0	0.0	
Other Hallucinogens	0.0	0.0	0.0	
Other Amphetamine	0.0	0.0	0.0	
Other Stimulants	0.0	0.0	0.0	
Benzodiazepines	0.1	0.0	0.2	
Other Tranquilizers	0.0	0.0	0.0	
Barbiturates	0.0	0.0	0.0	
Other Sedatives and Hypnotics	0.6	1.4	0.0	
Inhalants	0.1	0.2	0.0	
Over the Counter	0.1	0.0	0.2	
Steroids	0.0	0.0	0.0	
Ecstasy	0.0	0.0	0.0	
Oxycontin	0.5	0.8	0.0	
Other Prescribed Analgesics	0.2	0.0	0.0	
Other	0.1	0.0	0.0	

Note: Due to rounding, percentages may not add up to exactly 100%. A client's primary substance may change from admission to follow-up.



#### **Table 2. Secondary Substance**

Clients reporting no secondary substance increased by 42.4 percentage points from 47.7% at admission to 90.1% at follow-up; fewer than 10% of the clients reported using more than one substance six months post discharge. The most common secondary substance reported at admission and follow-up was marijuana. There were decreases between admission and follow-up for clients reporting the two most commonly used secondary substances, alcohol or marijuana, 16.9 and 16.2 percentage points respectively.

Secondary Substance	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		
	(weighted percent)	Admission	Follow-Up	
None	44.9	47.7	90.1	
Alcohol	18.7	19.6	2.7	
Cocaine/Crack	2.0	2.4	0.0	
Marijuana/Hashish	23.7	21.7	5.5	
Methamphetamine	7.2	5.8	0.8	
Heroin	0.5	0.0	0.4	
Non-Prescription Methadone	0.2	0.4	0.0	
Other Opiates and Synthetics	1.1	1.1	0.6	
PCP	0.0	0.0	0.0	
Other Hallucinogens	0.2	0.2	0.0	
Other Amphetamine	0.3	0.3	0.0	
Other Stimulants	0.0	0.0	0.0	
Benzodiazepines	0.7	0.2	0.0	
Other Tranquilizers	0.0	0.0	0.0	
Barbiturates	0.0	0.0	0.0	
Other Sedatives and Hypnotics	0.0	0.0	0.0	
Inhalants	0.0	0.0	0.0	
Over the Counter	0.1	0.2	0.0	
Steroids	0.0	0.0	0.0	
Ecstasy	0.0	0.0	0.0	
Oxycontin	0.3	0.4	0.0	
Other Prescribed Analgesics	0.0	0.0	0.0	
Other	0.2	0.0	0.0	

Note: Due to rounding, percentages may not add up to exactly 100%. A client's secondary substance may change from admission to follow-up.



Changes in frequency of use provide additional information regarding client outcomes following treatment. Since a client's primary substance may change from admission to follow-up, a simple comparison of frequency may not be comparable (e.g. having one drink three to six times per week versus smoking methamphetamine three to six times per week). Therefore, Table 3 presents data for a subset of the total group of clients who completed the follow-up interview who report using the same primary substance at both admission and follow-up. For example, a client may report using alcohol daily at admission and at follow-up report that they have used alcohol one to three times in the past month, representing a decrease in their frequency of use.

# Table 3. Frequency of Use of Primary Substance: Clients Indicating Use of Same Primary Substance at Both Admission and Follow-Up

Table 3 presents the change in frequency of use from admission to follow-up for individuals who reported the same primary substance at both admission and follow-up, and includes *only* clients who reported use at follow-up (therefore excludes clients who reported abstinence at follow-up). The "Increased Use" category presents the percentage of clients who indicated using their primary substance with more frequency at follow-up than reported at admission. "Maintained Same Use" represents clients reporting the same frequency of use of their primary substance at admission and follow-up. "Decreased Use" presents the percentage of clients who reported using their primary substance with less frequency at follow-up than indicated at admission.

This subgroup of 142 clients most commonly reported using their primary substance less frequently at follow-up compared to admission (39.5%); approximately one third indicated an increase in use of their primary substance at follow-up (33.5%); and 27% reported the same use pattern of their primary substance at both admission and follow-up.

Change in Frequency of Use	OMS Sample with Completed Follow-up Interviews Clients Reporting Same Primary Substance at Admission and Follow-Up N=142
Increased Use	33.5
Maintained Same Use	27.0
Decreased Use	39.5

Note: Due to rounding, percentages may not add up to exactly 100%.

In addition to the 142 clients represented in Table 3 above, 67 of the interviewed clients reported using a different primary substance at follow-up than the primary substance they reported at admission (therefore they are not included in Table 3 above). Thirty-eight of the 67 clients (56.7%) identified that their primary substance at follow-up was the substance they originally reported as their secondary substance at admission. Over 40% of the 67 in this group of clients switched from marijuana to alcohol and over 26% changed from methamphetamine to alcohol.

#### Table 4. AA, NA, or Similar Meetings Attended

At follow-up, more clients reported attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar meetings than at admission. Over 40% of clients reported attending meetings during the six months following discharge from treatment.

Average Number of Meetings Attended Per Month	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		ws
		Admission	Follow-Up	Change
None	78.3	77.4	59.5	-17.9
1 to 10 Meetings	16.7	17.0	29.1	+12.1
11 or More Meetings	5.0	5.6	11.5	+5.9

Note: Due to rounding, percentages may not add up to exactly 100%.

#### Table 5. Arrests

For the question regarding arrests, the admission response refers to the 12 months prior to admission and the follow-up response refers to the six months following discharge. Among clients with completed follow-up interviews, nearly 60% of clients reported arrests at admission, whereas just under 16% reported arrests at follow-up.

Number of Arrests	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		ws
	(weighted percent)	Admission	Follow-Up	Change
None	40.2	40.8	84.2	+43.4
1 to 3 Times	53.6	53.6	15.8	-37.8
4 or More Times	6.2	5.6	0.0	-5.6

Note: Due to rounding, percentages may not add up to exactly 100%.

#### Table 6. Hospitalizations Due to a Substance Abuse Related Problem

Overall, fewer clients reported substance abuse related hospitalizations at follow-up compared to admission. At follow-up, 5% of clients reported hospitalizations for substance abuse related problems since discharge, whereas nearly 11% of interviewed clients indicated substance abuse related hospitalizations in the six months prior to treatment admission.

Number of Hospitalizations	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		ws
	(weighted percent)	Admission	Follow-Up	Change
None	89.4	89.3	95.1	+5.8
1 to 3 Times	9.7	10.5	4.7	-5.8
4 or More Times	0.9	0.2	0.3	+0.1



#### **Table 7. Employment Status**

At follow-up, 60.1% of clients reported that they were employed full or part-time. Among clients with completed follow-up interviews, full-time employment increased by nearly 17 percentage points from admission to follow-up. Clients reporting they were unemployed (looking for work in the past 30 days) decreased by 23.5 percentage points from admission to follow-up. Clients categorized as not being in the labor force are clients who are not employed and not seeking employment; the category includes, but is not limited to, homemakers, students, and retired or disabled clients.

Employment Status	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		
	(weighted percent)	Admission Follow-Up Chang		Change
Employed Full-Time (>35 hrs/wk)	23.6	21.9	38.7	+16.8
Employed Part-Time (<35 hrs/wk)	14.6	13.7	21.4	+7.7
Unemployed (Looking For Work in the Past 30 Days)	45.0	46.9	23.4	-23.5
Not in Labor Force	16.9	17.5	16.5	-1.0

Note: Due to rounding, percentages may not add up to exactly 100%.

#### Table 8. Months Employed

At follow-up, over 50% of the clients reported employment of four months or more in the past six months. Clients reporting no employment in the previous six months decreased by 12.5 percentage points from admission to follow-up.

Months Employed	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		ws
		Admission	Follow-Up	Change
None	42.7	41.7	29.2	-12.5
Three Months or Less	18.5	18.6	19.7	+1.1
Four or More Months	38.8	39.7	51.2	+11.5

#### Table 9. Monthly Income

There were increases in the number of clients reporting monthly income in the two highest income categories (\$1001 to \$2000 and over \$2000) at follow-up, perhaps corresponding to the previous findings (Table 7 on previous page) that more clients were employed at follow-up. Over 40% of clients indicated their taxable monthly income at follow-up was over \$1000. There was a decrease (7.2 percentage points) in clients who indicated they had no monthly income from admission to follow-up.

Monthly Income	OMS Sample at Admission N=915* (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=385* (weighted percent)		
	(weighted percent)	Admission Follow-Up Chan		Change
None	43.3	43.7	36.5	-7.2
\$500 or Less	15.6	13.0	4.1	-8.9
\$501 to \$1000	17.2	18.1	17.1	-1.0
\$1001 to \$2000	18.5	21.2	29.5	+8.3
Over \$2000	5.5	3.9	12.7	+8.8

Note: Due to rounding, percentages may not add up to exactly 100%.

#### **Table 10. Primary Source of Support**

At both admission and follow-up, the "wages/salary" category was the most common primary source of support. From admission to follow-up, clients reporting "wages/salary" as their primary means of support increased by 13.9 percentage points and clients indicating "family/friends" as their primary source of support increased by 7.9 percentage points. Clients responding to the "none" category decreased by 24.7 percentage points from admission to follow-up.

Primary Source of Support	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		ws
	(weighted percent)	Admission Follow-Up		Change
None	24.1	26.0	1.3	-24.7
Wages/Salary	43.5	40.4	54.3	+13.9
Family/ Friends	19.0	18.5	26.4	+7.9
Public Assistance	3.6	4.5	4.9	+0.4
Retirement/ Pension	0.6	1.1	1.4	+0.3
Disability	0.9	1.3	2.0	+0.7
SSI and SSDI	3.1	4.2	2.9	-1.3
Other	5.3	3.9	7.0	+3.1



<sup>\*</sup>Data for 19 clients in the 'OMS Sample at Admission' column are excluded from this table due to records coded as not applicable, disabled, retired, or client declines to disclose income. Data from 23 clients in the 'OMS Sample with Completed Follow-Up Interviews' column are excluded due to admission records coded as not applicable, disabled, retired, or client declines to disclose income *or* clients at follow-up reporting variability of income (due to contractual or seasonal work or commission-based pay) or declining to disclose their income.

#### Table 11. Days Missed of Work or School Due to Substance Use

Among clients completing follow-up interviews, over 13% reported missing days of work or school due to a substance abuse issue in the six months prior to treatment admission. In the six month post-discharge period, few clients (3.8%) reported missing any days of work or school due to a substance abuse issue.

Days Missed	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		OMS Sample at Admission N=408		ws
	(weighted percent)	Admission	Follow-Up	Change		
Zero Days	89.2	86.6	72.2	-14.4		
1 to 5 Days	5.2	5.5	1.8	-3.7		
6 or More Days	5.5	7.9	2.0	-5.9		
Not Applicable*	0.1	0.0	24.1	+24.1		

Note: Due to rounding, percentages may not add up to exactly 100%.

#### **Table 12. Relationship Status**

The most common response was "single" with over 50% of clients reporting this relationship status at admission and nearly 50% reporting single at follow-up. "Divorced" was the second most common response at both admission and follow-up. Of those who completed follow-up interviews, clients reporting "cohabitating" more than doubled from admission to follow-up.

Relationship Status	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)  Admission Follow-Up Change		ws
	(weighted percent)			Change
Single	54.3	52.8	48.4	-4.4
Married	10.9	9.2	10.3	+1.1
Cohabitating	9.3	8.2	17.0	+8.8
Separated	6.5	6.6	3.8	-2.8
Divorced	17.7	21.3 19.2 -2.1		-2.1
Widowed	1.3	1.9	1.4	-0.5

<sup>\*</sup>Not applicable represents records coded as "not in labor force or school in last six months".

#### **Table 13. Living Arrangements**

The most common living arrangement reported by clients at both admission and follow-up was living with their parents, with over a quarter of clients reporting this. Among clients with completed interviews, living alone was the second most common living arrangement at admission and follow-up, followed by living with other adults.

Living Arrangements	OMS Sample at Admission N=934 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=408 (weighted percent)		ws
	(weighted percent)	Admission	Follow-Up	Change
Alone	15.2	17.4	18.2	+0.8
Parents	26.0	28.9	27.8	-1.1
Significant Other Only	11.8	9.8	10.0	+0.2
Significant Other and Child(ren)	11.4	9.3	15.4	+6.1
Child(ren) Only	3.4	4.4	6.7	+2.3
Other Adults	16.4	16.1	16.4	+0.3
Other Adults and Child(ren)	3.7	4.5	2.6	-1.9
Jail, Correctional Facility, Juvenile Detention	2.8	1.8	0.0	-1.8
Child/Adolescent Foster Care	0.2	0.0	0.0	0.0
Halfway House, Group Home, Transitional Housing*	5.5	3.8	1.9	-1.9
Shelter, Homeless	3.6	3.9	1.0	-2.9
Hospital	0.0	0.0	0.0	0.0

<sup>\*</sup>Included in the halfway house category are clients living in substance abuse halfway houses, correctional halfway houses, and transitional housing facilities.

#### Table 14. Education at Follow-Up

Admission data are not included in Table 14. The admission dataset does not provide a response category for a General Education Degree (GED), therefore admission and follow-up comparison cannot be made because the GED question is specifically asked at follow-up. Table 14 provides education status at follow-up by age indicated at admission. Age is separated into two groups: adults (18 and older) and adolescents (17 and younger). Nearly 45% of adults have an education level of high school only at follow-up; an additional 35.7% reported an education level beyond high school. Only 18.8% of adults reported that they did not graduate high school. Nearly 70% of adolescents and 17.5% of adults reported that they were enrolled in an education program during the six months between discharge and follow-up.

Level of Education	vith Completed Interviews 408 d percent)	
	Adults Adolescents N=394 N=14 (weighted percent) (weighted percent)	
Did Not Graduate High School	18.8	85.4
High School Only *	44.5	8.8
1 to 3 Years Post-Secondary Education	32.0	5.9
4 or More Years Post-Secondary Education	4.7	0.0

Note: Due to rounding, percentages may not add up to exactly 100%.

#### **OUTCOMES: ABSTINENCE**

Tables 15 through 23 examine abstinence at follow-up in relation to other variables at admission and follow-up. Abstinence refers to abstinence from all substances in the previous six months (follow-up period). The follow-up interviews occur approximately six months after the client was discharged from treatment; therefore, the follow-up period refers to the six months between the client's discharge from treatment and the follow-up interview.

In Table 15, the N for each response represents the number of abstinent clients out of the number of total clients who indicated that primary substance at admission. It is important to note that the variability in the percentages of clients abstaining from certain substances is likely due to varying numbers of clients participating in the follow-up interview who reported these substances at admission. For example, only one person who completed the follow-up interview reported inhalants as a primary substance, compared to 218 people who reported alcohol.

<sup>\*</sup>Clients who receive a General Education Degree (GED) are grouped with clients in the "High School Only" category.

#### Table 15. Primary Substance at Admission by Abstinence at Follow-Up

Of clients who reported methamphetamine as their primary substance at admission, 53.4% were abstinent at follow-up. Additionally, 48.9% of the clients who indicated marijuana as their primary substance at admission abstained during the follow-up period and 47% of clients who indicated alcohol as their primary substance at admission were abstinent during the follow-up period. There are no statistically significant associations between primary substance at admission and abstinence at follow-up (Cochran-Mantel-Haenszel Test, p > 0.05).

Primary Substance at Admission	OMS Sample Abstinence at Follow-Up weighted percent (N=408)
Alcohol	47.0 (102/218)
Cocaine/Crack	63.4 (6/9)
Marijuana/Hashish	48.9 (48/98)
Methamphetamine	53.4 (32/60)
Heroin	21.8 (1/4)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	36.8 (3/9)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	0.0 (0/0)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/0)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	100.0 (6/6)
Inhalants	0.0 (0/1)
Over the Counter	0.0 (0/0)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	32.4 (1/3)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

In Tables 16 through 23, the percentages and the N for each response in the "Abstinent" column represent the number of clients responding out of the total number of abstinent clients; the percentages and N in the "Non-Abstinent" column represent the number of clients responding out of the total number of non-abstinent clients. Of the 408 clients who completed a follow-up interview, 199 (48.8%) were abstinent and 209 (51.2%) were not abstinent.

#### Table 16. Employment at Follow-Up by Abstinence at Follow-Up

Table 16 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by employment status reported at follow-up. There are no statistically significant associations between abstinence and employment at follow-up (Cochran-Mantel-Haenszel Test, p > 0.05).

Empleyment Status	OMS Sample at Follow-Up N=408		
Employment Status	Abstinent weighted percent (N=199)	Non-Abstinent weighted percent (N=209)	
Employed Full-Time ( <u>&gt;</u> 35 hrs/wk)	36.8 (73)	40.6 (85)	
Employed Part-Time (<35 hrs/wk)	22.9 (45)	20.0 (42)	
Unemployed (looking for work in the past 30 days)	21.9 (44)	24.8 (52)	
Not in Labor Force	18.5 (37)	14.7 (30)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

# Table 17. Change in Employment Status from Admission to Follow-Up by Abstinence at Follow-Up

Table 17 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by the change in employment status from admission to follow-up. Increased employment includes clients who changed from not being in the labor force or were unemployed at admission to having any employment at follow-up, or those who changed from being employed part-time at admission to full-time at follow-up. Decreased employment includes clients who changed from having any employment at admission to being unemployed or not in the labor force at follow-up, or those who changed from being employed full-time at admission to part-time at follow-up.

Change in	<u>-</u>	mple at Follow-Up N=408	
Employment Status	Abstinent weighted percent (N=199)	Non-Abstinent weighted percent (N=209)	
Increased Employment	43.7 (87)	36.8 (77)	
Maintained Full-Time Employment	12.0 (24)	16.5 (35)	
Maintained Part-Time Employment	3.7 (7)	4.5 (9)	
Remained Unemployed	11.8 (23)	18.2 (38)	
Remained Not in the Labor Force	9.9 (20)	7.9 (16)	
Decreased Employment	19.0 (38)	16.2 (34)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.



#### Table 18. Living Arrangements at Follow-Up by Abstinence at Follow-Up

Table 18 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by living arrangements reported at follow-up. The most common living arrangement for both abstinent and non-abstinent clients was living with parents. There are significant associations between abstinence and living arrangements at follow-up (Likelihood Ratio Chi-Square Test, p < 0.01). Additional analyses indicate there are statistically significant associations for abstinence and clients reporting children living in their home at follow-up, which include clients reporting the following living arrangement categories: "significant other and child(ren)", "child(ren) only", and "other adults and child(ren)" (Fisher's Exact Test, p < 0.01): 31.3% of abstinent clients indicate living with children compared with 18.4% of non-abstinent clients.

Living Avenuenante*	OMS Sample at Follow-Up N=408		
Living Arrangements*	Abstinent weighted percent (N=199)	Non-Abstinent weighted percent (N=209)	
Alone	18.9 (38)	17.5 (36)	
Parents	20.9 (42)	34.4 (72)	
Significant Other Only	9.3 (18)	10.7 (22)	
Significant Other and Child(ren)	19.1 (38)	12.0 (25)	
Child(ren) Only	10.0 (20)	3.6 (8)	
Other Adults	17.5 (35)	15.4 (32)	
Other Adults and Child(ren)	2.2 (4)	2.8 (6)	
Jail/Correctional Facility	0.0 (0)	0.0 (0)	
Homeless, Shelter	0.0 (0)	1.9 (4)	
Halfway House, Group Home, Transitional Housing**	2.1 (4)	1.7 (4)	
Hospital	0.0 (0)	0.0 (0)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \*Statistically significant (Likelihood Ratio Chi-Square Test, p < 0.01).

<sup>\*\*</sup>Included in the halfway house category are clients living in substance abuse halfway houses, correctional halfway houses, and transitional housing facilities.

#### Table 19. Monthly Income at Follow-Up by Abstinence at Follow-Up

Table 19 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by monthly income reported at follow-up. Abstinent and non-abstinent clients most commonly report no monthly income. There are no statistically significant trends between abstinence and monthly income at follow-up (Jonckheere-Terpstra Test, p > 0.05).

Monthly by any	OMS Sample at Follow-Up N=385*		
Monthly Income	Abstinent weighted percent (N=187)	Non-Abstinent weighted percent (N=198)	
None	35.0 (65)	37.9 (75)	
\$500 or less	5.8 (11)	2.6 (5)	
\$501 to \$1000	19.1 (36)	15.3 (30)	
\$1001 to \$2000	32.8 (61)	26.5 (53)	
Over \$2000	7.4 (14)	17.7 (35)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \* Data from 23 clients who completed a follow-up interview are excluded due to admission records coded as not applicable, disabled, retired, or client declines to disclose income *or* clients at follow-up reporting variability of income (due to contractual/seasonal work or commission based pay) or declining to disclose their income.

#### Table 20. Change in Income from Admission to Follow-Up by Abstinence at Follow-Up

Table 20 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by the change in income from admission to follow-up. "Increased Monthly Income" indicates clients have moved from a smaller income category at admission to a larger income category at follow-up. "Decreased Monthly Income" represents clients who have moved from a larger income category at admission to a smaller income category at follow-up.

Change in	OMS Sample at Follow-Up N=385*		
Monthly Income	Abstinent weighted percent (N=187)	Non-Abstinent weighted percent (N=198)	
Increased Monthly Income	36.7 (69)	42.5 (84)	
Maintained Over \$2000	1.4 (3)	3.1 (6)	
Maintained \$1001 to \$2000	13.7 (26)	8.0 (16)	
Maintained \$501 to \$1000	6.2 (11)	5.6 (11)	
Maintained \$500 or Less	1.4 (2)	0.3 (1)	
Maintained No Income	14.4 (27)	25.8 (51)	
Decreased Monthly Income	26.1 (49)	14.7 (29)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \* Data from 23 clients who completed a follow-up interview are excluded due to admission records coded as not applicable, disabled, retired, or client declines to disclose income *or* clients at follow-up reporting variability of income (due to contractual/seasonal work or commission based pay) or declining to disclose their income.

# Table 21. Primary Income Source at Admission and Follow-Up by Abstinence at Follow-Up

Table 21 presents responses for primary income source at both admission and follow-up for clients who completed the follow-up interview. The second and third columns list the percentage of abstinent and non-abstinent clients at follow-up by income source at admission. The fourth and fifth columns list the percentage of abstinent and non-abstinent clients at follow-up by income source at follow-up. At both admission and follow-up, the most common income source reported by abstinent and non-abstinent clients was "wages/salary". There are statistically significant associations between abstinence and primary income source at both admission and follow-up (Likelihood Ratio Chi-Square Test, p < 0.05).

	OMS Sample at Follow-Up N=408			
Primary Income Source	Primary Income Source at Admission*		Primary Income Source at Follow-Up*	
	Abstinent weighted percent (N=199)	Non-Abstinent weighted percent (N=209)	Abstinent weighted percent (N=199)	Non-Abstinent weighted percent (N=209)
None	29.2 (58)	23.1 (48)	1.3 (3)	1.3 (3)
Wages/ Salary	37.4 (74)	43.4 (90)	52.6 (105)	55.9 (117)
Family/ Friends	15.7 (31)	21.3 (44)	23.4 (47)	29.2 (61)
Public Assistance	7.3 (15)	1.7 (4)	6.9 (14)	2.9 (6)
Retirement/ Pension	2.4 (5)	0.0 (0)	2.3 (4)	0.5 (1)
Disability	0.7 (1)	1.8 (4)	0.7 (1)	3.3 (7)
SSI and SSDI	4.3 (9)	4.1 (9)	5.1 (10)	0.8 (1)
Other	3.1 (6)	4.7 (10)	7.8 (15)	6.2 (13)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \*Statistically significant (Likelihood Ratio Chi-Square Test, p < 0.05).



#### Table 22. Arrests at Follow-Up by Abstinence at Follow-Up

There are statistically significant differences between abstinence and arrest categories at follow-up (Cochran-Mantel-Haenszel Test, p < 0.0001). The percentage of abstinent clients who reported no arrests during the follow-up period (93.9%) was higher than the percentage of non-abstinent clients who reported no arrests (75%). The percentage of non-abstinent clients who reported being arrested one to three times at follow-up (25%) was over four times higher than that of the abstinent clients (6.1%) reporting the same arrest frequency.

Arrests*	OMS Sample at Follow-Up N=408			
Arresis	Abstinent Non-Abstine weighted percent (N=199) weighted percent			
None	93.9 (187)	75.0 (157)		
1 to 3 Times	6.1 (12)	25.0 (52)		
4 or More Times	0.0 (0)	0.0 (0)		

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \*Statistically significant (Cochran-Mantel-Haenszel Test, p < 0.0001).

#### Table 23. AA, NA, or Similar Meetings Attended at Follow-Up by Abstinence at Follow-Up

Of the 408 clients who completed a follow-up interview, 40.6% reported attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar meetings in the six months following discharge. There are no statistically significant associations between meeting attendance and abstinence at follow-up (Cochran-Mantel-Haenszel Test, p > 0.05).

Average Number of Meetings	OMS Sample at Follow-Up N=408		
Attended Per Month	Abstinent weighted percent (N=199)	Non-Abstinent weighted percent (N=209)	
None	53.7 (107)	65.0 (136)	
1 or More Meetings	46.3 (92)	35.0 (73)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

#### **OUTCOMES: ARRESTS AND EMPLOYMENT**

Table 24, on the following page, examines arrests at follow-up in relation to primary substance at admission. For this table, clients were categorized as having no arrests since discharge or having one or more arrests since discharge from treatment. The N for each response represents the number of clients with no arrests at follow-up out of the number of total clients who indicated that substance at admission. As previously noted, it is important to note in Tables 24 and 25 that the variability in the percentages of clients abstaining from certain substances is likely due to varying numbers of clients participating in the follow-up interview who reported these substances at admission, only one person who completed the follow-up interview reported inhalants as a primary substance, compared to 218 people who reported alcohol.



#### Table 24. No Arrests at Follow-Up by Primary Substance at Admission

Of the clients who reported alcohol as the primary substance at admission, 88.6% were arrest-free at follow-up. Additionally, 81.6% of clients indicating marijuana as the primary substance at admission and 75.2% of clients reporting methamphetamine as the primary substance at admission were arrest-free. There are statistically significant associations between primary substance at admission and no arrests at follow-up (Cochran-Mantel-Haenszel Test, p < 0.01).

Primary Substance at Admission*	OMS Sample No Arrests at Follow-Up weighted percent (N=408)	
Alcohol	88.6 (193/218)	
Cocaine/Crack	100.0 (9/9)	
Marijuana/Hashish	81.6 (80/98)	
Methamphetamine	75.2 (45/60)	
Heroin	79.7 (3/4)	
Non-Prescription Methadone	0.0 (0/0)	
Other Opiates and Synthetics	60.9 (5/9)	
PCP	0.0 (0/0)	
Other Hallucinogens	0.0 (0/0)	
Other Amphetamine	0.0 (0/0)	
Other Stimulants	0.0 (0/0)	
Benzodiazepines	0.0 (0/0)	
Other Tranquilizers	0.0 (0/0)	
Barbiturates	0.0 (0/0)	
Other Sedatives and Hypnotics	100.0 (6/6)	
Inhalants	100.0 (1/1)	
Over the Counter	0.0 (0/0)	
Steroids	0.0 (0/0)	
Ecstasy	0.0 (0/0)	
Oxycontin	32.4 (1/3)	
Other Prescribed Analgesics	0.0 (0/0)	
Other	0.0 (0/0)	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.



<sup>\*</sup>Statistically significant (Cochran-Mantel-Haenszel Test, p < 0.01).

Table 25 examines employment status at follow-up in relation to primary substance reported at admission. For this table, clients were categorized as being employed full-time (35 or more hours per week) at follow-up, or not being employed full-time at follow-up. The N for each response represents the number of clients who were employed full-time at follow-up out of the number of total clients who indicated that substance at admission.

#### Table 25. Full-Time Employment at Follow-Up by Primary Substance at Admission

Six months following discharge, 64.2% of clients reporting marijuana as the primary substance at admission were employed full-time. In addition, 61.6% of clients indicating alcohol and 50.1% of clients reporting methamphetamine were employed full-time at follow-up. There are no significant differences between full-time employment at follow-up and primary substance reported at admission (Cochran-Mantel-Haenszel Test, p > 0.05).

Primary Substance at Admission	OMS Sample Employed Full-Time at Follow-Up weighted percent (N=408)
Alcohol	61.6 (134/218)
Cocaine/Crack	75.9 (7/9)
Marijuana/Hashish	64.2 (63/98)
Methamphetamine	50.1 (30/60)
Heroin	19.3 (1/4)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	37.5 (3/9)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	0.0 (0/0)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/0)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	100.0 (6/6)
Inhalants	100.0 (1/1)
Over the Counter	0.0 (0/0)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	12.4 (0/3)*
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.



<sup>\*</sup>In some cases, the number of clients is rounded down to zero, however there is an actual weighted percent.

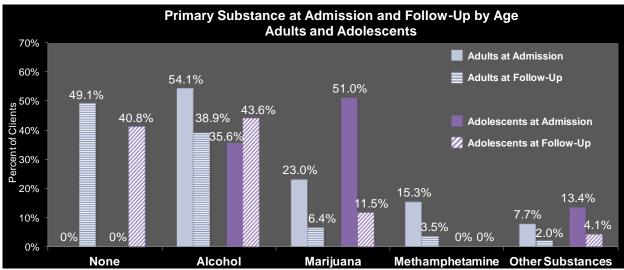
#### **OUTCOMES: AGE AND SEX**

Figures 4 through 6 present selected variables at admission and follow-up presented by age and sex. Age is separated into two groups: adults (18 and older) and adolescents (17 and younger). Of the 408 clients who completed the follow-up interview, 394 were adults (96.6%) and 14 were adolescents (3.4%). There were 295 males (72.3%) and 113 females (27.7%). The variables presented include primary substance and frequency of use of primary substance by sex for individuals who reported using the same primary substance at both admission and follow-up.

The three primary substances that clients reported most often were alcohol, marijuana, and methamphetamine (see Table 1 on page 7). Figure 4 shows the percentages of adults and adolescents and Figure 5 shows the percentage of males and females related to these three substances; the following primary substances are grouped together in the "other substances" category: cocaine/crack, heroin, other opiates and synthetics, benzodiazepines, other sedatives/hypnotics, over the counter, inhalants, and oxycontin.

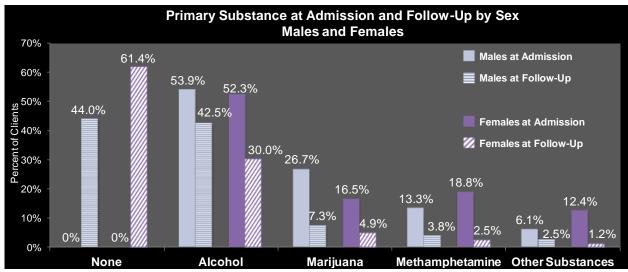
#### Figure 4. Primary Substance at Admission and Follow-Up by Age

At admission, alcohol was the most frequently reported primary substance among adults while marijuana was the most common among adolescents. Over half of the adults at admission (54.1%) reported alcohol as the primary substance compared to 35.6% of adolescents. Over 50% of adolescents indicated marijuana as the primary substance at admission compared to fewer than a quarter of the adults (23%). At follow-up, 40.8% of the adolescents and nearly half of the adults (49.1%) reported abstinence during the six months following discharge from treatment. Alcohol was the most frequently reported primary substance at follow-up by both groups, indicated by 38.9% of adults and 43.6% of the adolescents.



#### Figure 5. Primary Substance at Admission and Follow-up by Sex

At follow-up, more females (61.4%) than males (44%) reported abstinence during the six months following discharge from treatment. At admission, over half of males (53.9%) and females (52.3%) reported alcohol as the primary substance. Although a higher percentage of females (18.8%) than males (13.3%) reported methamphetamine as their primary substance at admission, at follow-up there a higher percentage of males (3.8%) than females (2.5%) indicated methamphetamine as their primary substance. At both admission and follow-up, there were higher percentages of males than females reporting marijuana as their primary substance.

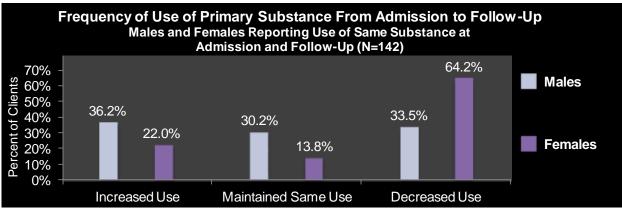


Note: Due to rounding, percentages may not add up to exactly 100%.

Figure 6, on the following page, is a subset of the total group of clients who completed the follow-up interview and presents frequency of use data for individuals who reported using the same primary substance at both admission and follow-up by sex; the figure includes *only* clients who reported use at follow-up (142 clients). Data for frequency of use of primary substance by age are not included in this report due to the low number of adolescents reporting use of the same substance at admission and follow-up (one client). Figure 6 shows the percentage of males and females in association with the frequency of use of their primary substance at admission and follow-up. For this subset of 142 clients it is important to note that 114 clients (80.3%) were male and 28 clients (19.7%) were female.

# Figure 6. Frequency of Use of Primary Substance by Sex: Clients Indicating Use of Same Primary Substance at Both Admission and Follow-Up

For individuals who indicated using the same primary substance at both admission and follow-up, six months following treatment discharge, more males than females reported an increase in use of their primary substance from admission to follow-up (36.2% and 22% respectively). Few females (13.8%) reported the same frequency of use at both admission and follow-up compared to 30.2% of males. Approximately one third of males (33.5%) and nearly two thirds of females (64.2%) indicated a decrease in use of their primary substance from admission to follow-up.



Note: Due to rounding, percentages may not add up to exactly 100%.

#### LENGTH OF STAY AND DISCHARGE STATUS

Length of stay is defined as the number of days from admission through discharge. This section examines length of stay related to three outcome variables at follow-up (abstinence, arrests, and full-time employment), discharge status by the three outcome variables, and length of stay by primary substance at admission. In Tables 26 and 27, the number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

In Table 26 on the following page, the first column presents the length of stay categories; the second column presents the approximate number of clients (due to weighting) with completed follow-up interviews in each length of stay category. The third column presents the percentage of clients who had no substance use during the follow-up period for each length of stay range; numbers in parentheses represent the approximate number of clients who were abstinent. For example, 20 of the 40 clients (weighted percent = 50.5%) who were in treatment less than seven days were abstinent at follow-up. Data in the "no arrests" and "employed full-time" columns are presented in the same manner as the "abstinent" column. Data for one client who completed the follow-up interview are omitted due to an ambiguous discharge date.

#### Table 26. Length of Stay by Outcome Variables at Follow-Up

The most common length of stay for clients who completed the follow-up interview was 7-30 days, with 85 clients (20.9%) in this category. The next most common was 61-90 days with 82 clients. There is no significant simple trend between length of stay and outcome variables at follow-up (Jonckheere-Terpstra Test, p > 0.05).

OMS Sample at Follow-Up N=407*						
Length Of Stay	N	Abstinent No Arrests weighted percent (N) weighted percent (N)		Employed Full-Time weighted percent (N)		
Less Than 7 Days	40	50.5 (20)	69.3 (28)	35.0 (14)		
7 - 30 Days	85	40.9 (35)	83.8 (71)	37.8 (32)		
31 - 60 Days	78	50.8 (39)	86.4 (67)	37.1 (29)		
61 - 90 Days	82	53.3 (44)	93.1 (76)	37.6 (31)		
91 - 120 Days	41	54.1 (23)	76.1 (32)	54.7 (23)		
More than 120 Days	81	46.7 (38)	85.1 (69)	35.7 (29)		

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \*Data for one client are omitted due to an ambiguous discharge date.

Table 27 on the following page shows the three outcome variables for the follow-up interview (abstinence, no arrests, and full-time employment) by treatment discharge status. There are three discharge categories: successful completion; terminated (clients discharged from the program due to noncompliance, lack of treatment progress, or client leaving); and neutral (this category includes, but is not limited to, managed care decision, referral to another program, incarceration, or death). The first column presents the discharge categories. The second column presents the approximate number of clients with completed follow-up interviews in each discharge category. The third column presents the percentage of clients who reported abstinence at follow-up (had no substance use during the follow-up period) for each discharge category; numbers in parentheses represent the approximate number of clients (due to weighting) who were abstinent. For example, 119 of the 243 clients (weighted percent = 49.2%) who were successfully discharged were abstinent at follow-up. Data in the "no arrests" and "employed full-time" columns are presented in the same manner as the "abstinent" column. It is important to note that clients who were successfully discharged comprise the majority of the clients interviewed: 60.4% of the clients in Table 27.

#### Table 27. Discharge Status by Outcome Variables at Follow-Up

Of the 408 clients who completed a follow-up interview, 402 are represented in Table 27; discharge data for six clients are omitted (due to missing discharge reasons). Of the 402 clients, 243 clients (60.4%) were discharged as successful cases and 159 clients (39.6%) did not successfully complete the treatment program. Of the 159 clients who did not complete treatment, 147 were terminated and 12 were neutral discharges. Of the 243 clients who completed follow-up interviews and were successfully discharged: 49.2% were abstinent, 86.6% had not been arrested; and 65.2% were working full-time. There are statistically significant associations between discharge status and full-time employment at follow-up (Cochran-Mantel-Haenszel Test, p < 0.01). There are no significant associations between discharge status and abstinence at follow-up and discharge status and no arrests at follow-up (Cochran-Mantel-Haenszel Test, p > 0.05).

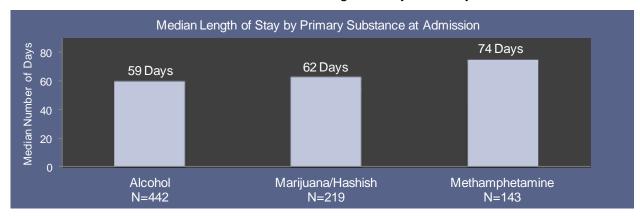
OMS Sample at Follow-Up N=402						
Discharge N Abstinent No Arrests Employed Full-T weighted percent (N) weighted percent (N) weighted percent						
Successful Completion	243	49.2 (119)	86.6 (210)	65.2 (158)		
Terminated	147	46.0 (68)	80.0 (118)	49.6 (73)		
Neutral Discharge	12	56.3 (7)	79.2 (9)	72.9 (9)		
Total	402	48.2 (194)	84.0 (337)	59.7 (240)		

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%. \*Statistically Significant (Cochran-Mantel-Haenszel Test, p < 0.01).

Unlike previous tables in this section that include data only from clients who completed follow-up interviews, data in Figure 7 and Table 28 on the following pages are drawn from all discharged clients who were in the 2011 OMS sample. As of September 4, 2012, of the 934 clients in the OMS sample, discharge information had been received for 867 clients and 67 were still receiving treatment services. The most often reported primary substances at admission are: alcohol, marijuana, and methamphetamine (see Table 1, page 7). Figure 7 presents the median length of stay for discharged clients for each of the three primary substances reported at admission. Table 28 presents the percentage of clients in each length of stay category for the three substances.

#### Figure 7. Median Length of Stay by Primary Substance at Admission

Clients whose primary substance at admission was methamphetamine had the longest median length of stays of 74 days. Clients who indicated marijuana as the primary substance at admission had a median length of stay of 62 days. Clients whose primary substance at admission was alcohol had the shortest median length of stay of 59 days.



#### Table 28. Length of Stay by Primary Substance at Admission

There are no statistically significant trends between length of stay and primary substance reported at admission (Jonckheere-Terpstra Test, p > 0.05). The length of stay category with the largest percentage of clients reporting marijuana and methamphetamine as the primary substances at admission was more than 120 days and the category with the largest percentage of clients indicating alcohol was the 7 to 30 days category.

Length of Stay							
Primary Substance at Admission	N	N Less Than 7 – 30 31 – 60 61 – 90 91 – 120 More th 120 Days Days Days Days Days Days Weighted percent weighted percent percent percent percent percent					
Alcohol	442	6.2	22.9	21.8	17.8	12.4	18.8
Marijuana/Hashish	219	13.2	13.0	22.4	20.2	8.1	23.1
Methamphetamine	143	10.1	20.9	14.2	13.7	15.8	25.3

#### CLIENTS' PERCEIVED BENEFITS

#### Table 29. Clients' Perceived Benefits

Table 29 presents client responses at the follow-up interview when asked their opinions of the various types of treatment received in the substance abuse treatment programs. Results from 408 completed interviews at six months post discharge indicate that over 90% of the clients feel that the substance abuse treatment they received was either very beneficial or beneficial overall. "Very beneficial" was the response indicated most often for individual counseling. Clients who responded "did not receive" for a certain type of counseling could have done so for various reasons including that the type of counseling was not recommended, the type of counseling was not offered, or the type of counseling was offered but the client chose not to participate.

	OMS Sample at Follow-Up N=408					
Perceived Benefit of Counseling	Individual Counseling % (N=408)	Overall Rating of Treatment Program % (N=408)				
Very Beneficial	44.9 (183)	2.5 (10)	30.2 (123)	31.4 (128)	45.3 (185)	
Beneficial	41.4 (169)	3.7 (15)	41.4 (169)	50.0 (204)	45.6 (186)	
Not Beneficial	10.0 (41)	0.7 (3)	14.5 (59)	11.8 (48)	9.1 (37)	
Did Not Receive	3.7 (15)	93.1 (380)	14.0 (57)	6.9 (28)	Not Applicable	

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

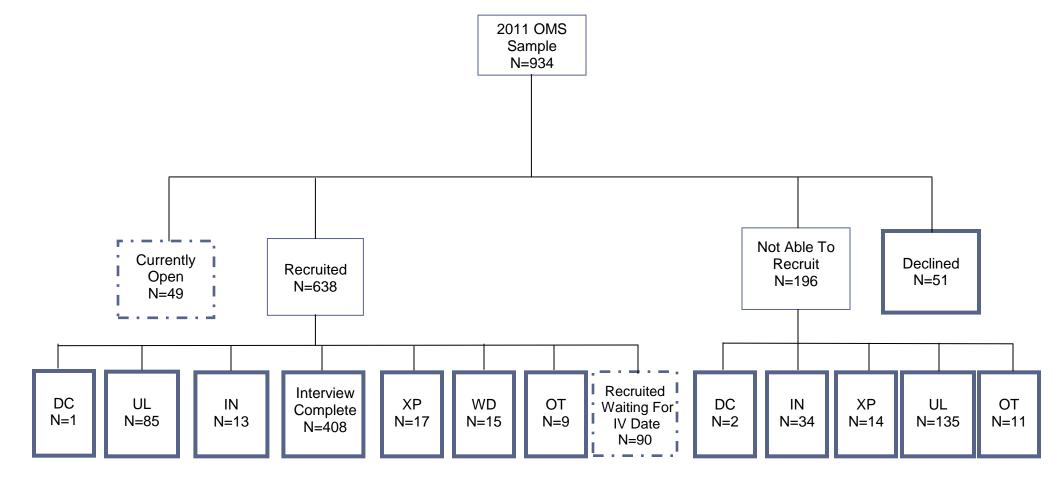
## APPENDIX: PRESENTATION OF TRACKING DATA

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**Table A1. Client Classifications** 

Sample Size	The total number of clients who have been randomly selected for inclusion in the OMS project.
Currently Open	This includes clients that staff is actively trying to locate and recruit, however has not made contact with. Included are clients who have been left messages and/or sent letters, and have not yet responded to repeated contact attempts.
Recruited	This includes clients who at some point agreed to participate in the follow-up interview. Included are clients who were recruited but incarcerated at the time of their interview, were recruited but could not be located at the time of their interview, were recruited and interviewed, were recruited but waiting for their interview date, were recruited but their interview date had expired at the time the Consortium received notice of their discharge date, were recruited but withdrew from the project, or were recruited but were deceased before their interview date.
Not Able to Recruit	This includes clients that staff has never been able to successfully contact. Included are clients who had not been successfully contacted and were incarcerated at the time of their interview date, clients who staff were unable to locate despite months of effort, clients who had not been contacted but had a potential interview date that had already passed when the Consortium received notice of the clients' discharge date, and clients who were deceased before staff could contact them.
Interview Completed	Interview has been successfully completed. Case is closed.
Declined	Client declined participation in the follow-up interview. Case is closed.
Deceased	Client was deceased. The client may or may not have been successfully recruited. Case is closed.
Withdrew	Client initially agreed to participate in the study but then decided not to participate in the project. Case is closed.
Expired	When Consortium received discharge date, the subsequent interview date had already past (expired). Client may or may not have been successfully recruited. Case is closed.
Other	The Consortium encountered delays adjusting to the new IDPH Central Data Repository System. Therefore, clients were beyond the acceptable follow-up interview time frame when discharge data were located. Client may or may not have been successfully recruited. Case is closed.
Recruited- In Progress	Client agreed to take part in the follow-up interview. Client will receive update calls and/or letters until the interview date nears. Case will close when interview takes place.
Unable to Locate	Staff was not able to make contact with the client either via the telephone or mail at time interview was due to take place. Client may have initially been contacted and successfully recruited. Case is closed.
Incarcerated	Client incarcerated at the time interview was due to take place. The client may or may not have been successfully recruited. Case is closed.

Figure A1. Classification of 2011 OMS Sample



Key: DC= Deceased, UL=Unable to Locate, IN=Incarcerated, XP=Expired, WD= Withdrew, OT=Other

<sup>\*</sup>Bolded boxes represent clients with a closed status. Dashed boxes represent clients with an open status (staff are attempting to locate, recruit, and/or interview the client.)

Table A2. Case Status - All Clients

Status	Number of Clients
Open Cases	139
Closed Cases	795
Total	934

**Table A3. Closed Clients by Category** 

Category	Number of Clients	Percentage of Clients
Follow-Up Interview Complete	408	51.3
Unable to Locate	220	27.7
Declined or Withdrew Participation	66	8.3
Incarcerated	47	5.9
Expired	31	3.9
Other	20	2.5
Deceased	3	0.4
Total	795	100.0

Due to rounding, percentages may not add up to exactly 100%.

Table A4. Recruitment and Follow-Up Rates

Category	Percentage		
Recruitment	77.4 (638/824)		
Follow-Up	80.3 (408/508)		

#### Client Contacts: 2011 OMS Sample

Table A5. Type and Number of Client Contacts through September 3, 2012

Type of Contact	Adolescents N=29	Adults N=837	Total N=896
An outgoing phone call attempting to recruit client.	307	7,679	7,986
An outgoing phone call in which recruitment has actually taken place and the client has agreed to participate.	25	485	510
An incoming phone call in which recruitment has actually taken place and the client agreed to participate.	6	122	128
An outgoing phone call attempting to update/check-in with client.	129	3,481	3,610
An incoming or outgoing phone call in which a successful update occurs with client.	30	888	918
An incoming phone call from client or collateral contact (not from treatment agency).	10	430	440
An outgoing phone call attempting to reach client for the six month follow-up interview.	209	4,111	4,320
An outgoing phone call completing the six month follow-up interview.	20	324	344
An incoming phone call in which the six month follow- up interview is completed.	5	59	64
An outgoing phone call attempting to track client through collateral contacts.	0	38	38
Any incoming and outgoing attempts (phone call/letter/fax/email) to track client through their substance abuse treatment agency.	27	365	392
Other - usually an internet search, but includes any call/contact that doesn't fall under any other category.	226	3,162	3,388
A letter sent to contact client; includes letters that have been returned and notification of address changes from post office; outgoing or incoming.	340	6,351	6,691
All Client Contacts	1,334	27,495	28,829

Table A6. Contacts for Clients with Closed Cases\*

Status	Clients	All Contacts	Contacts (Mean)	Number of Letters Mailed
Interviews Completed	408	9,469	23.2	2,236
Unable to Locate	220	10,087	45.9	2,416
Declined	51	670	13.1	149
Incarcerated	47	1,396	29.7	320
Expired	31	720	23.2	170
Other	20	449	22.5	149
Withdrew	15	502	33.5	81
Deceased	3	66	22.0	9
Grand Total	795	23,359	29.4	5,530

<sup>\*</sup> Information in Table A6 represents only closed cases. Cases are closed for 795 of the 934 clients (85.1%) in this report.